



VOLUME 63 ISSUE 8

ARRL AFFILIATED-SPECIAL SERVICE CLUB

August 2013

# Colorado QSO Party!

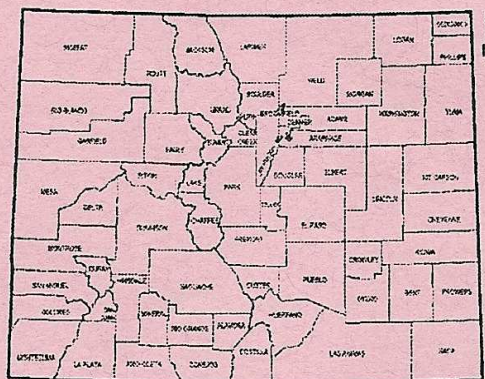
1200Z August 31—0400Z September 1, 2013

Join other stations on the air *Saturday, August 31st* and work to contact hams in Colorado's 64 counties! Operate CW, Phone, Digital, or any combination on all HF contesting bands, VHF, and UHF. Mark your calendars now and join us on the air in August!

Details at:

[www.ppraa.org/coqp](http://www.ppraa.org/coqp)

- Rules
- Logging Software
- Award Categories
- County Activation Plans
- Latest News



## Monthly Ham Breakfast

### LOCATION

Time is from 8:00-9:30 AM

All are warmly invited to come on down and join us!

## August PPRAA Club Meeting

**The August 14th 7 pm club meeting will be at the IHop on Stetson Hills Blvd (just west of Powers Blvd). 5749 Stetson Hills Blvd.**





## PPRAA Club Officers

<b>President</b>	<b>Mike Derbort</b>	<b>KCØELG</b>
<b>Vice President</b>		
<b>Secretary</b>	<b>Diana Nordstrom</b>	<b>KCØNPP</b>
<b>Treasurer</b>	<b>Pam Scott</b>	<b>WØPRS</b>
<b>Board</b>	<b>Tom Brereton</b>	<b>WØTOM</b>
<b>Board</b>	<b>John Wishart</b>	<b>KCØJFH</b>
<b>Board</b>	<b>Doug Neilsen</b>	<b>N7LEM</b>
<b>Board</b>	<b>Jim Bishop</b>	<b>KDØKQL</b>
<b>Board</b>	<b>Virgil Yost</b>	<b>NØXRS</b>
<b>Board</b>	<b>Kerrienne Dixon</b>	<b>KDØIPR</b>
<b>Board</b>	<b>Jim Rader</b>	<b>KDØNQM</b>
<b>Ø-Beat Editor</b>	<b>Mike Anderson</b>	<b>WV7T</b>

All officers can be contacted at:

[boardmembers@ppraa.org](mailto:boardmembers@ppraa.org)

## Garden of the Gods Amateur Radio Club



### Garden of the Gods ARC meeting

First Monday of each month at Fargos Pizza at 11:30 am. All are welcome.

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## ELECTIONS IN OCTOBER!

NEW Ø-BEAT EDITOR NEEDED

## PPRAA FACE BOOK

<http://www.facebook.com/pages/PPRAA-Pikes-Peak-Radio-Amateur-Association/185833894769325?v=wall>

## MEGAFEST 2013





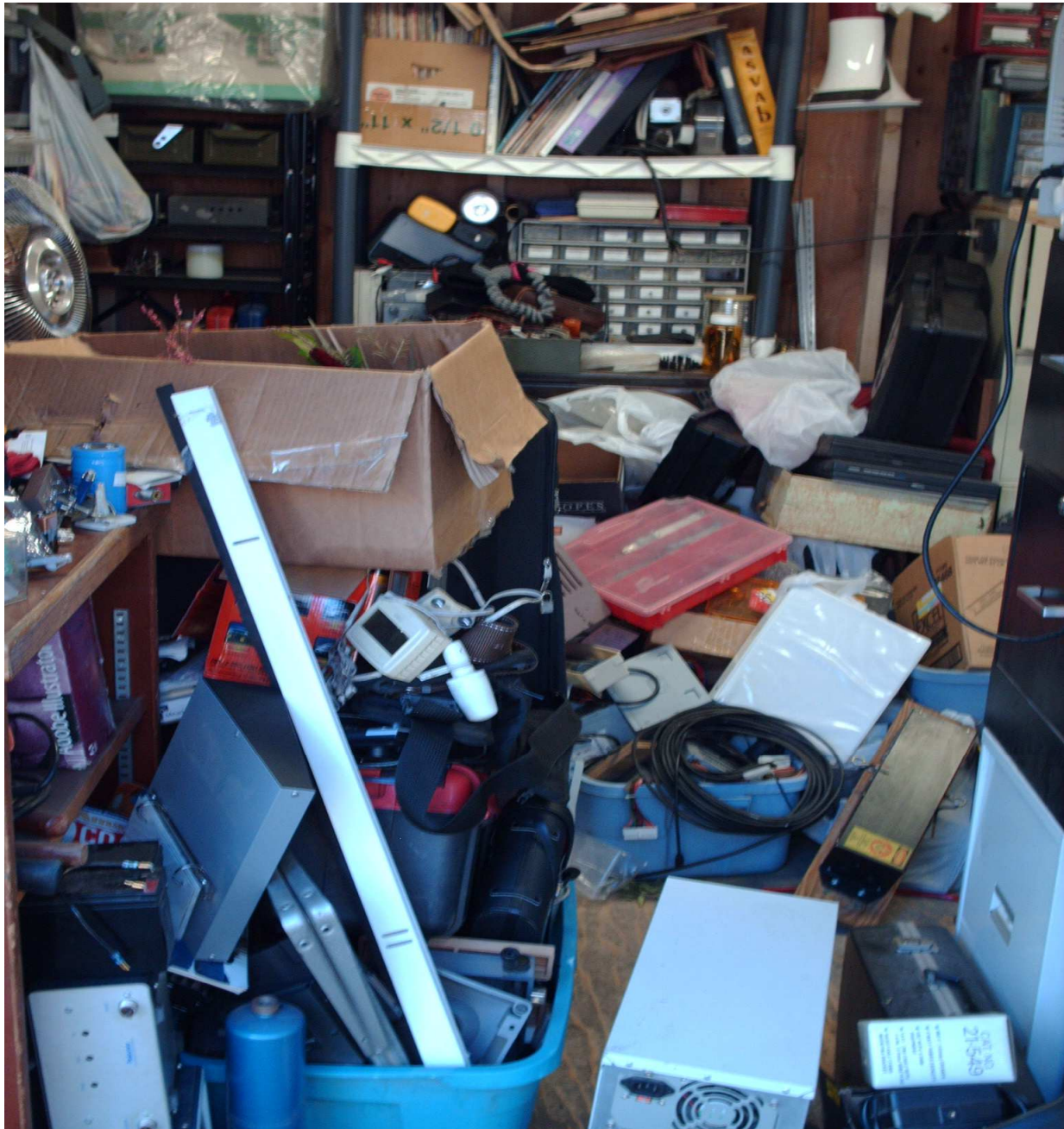
## VE SESSION





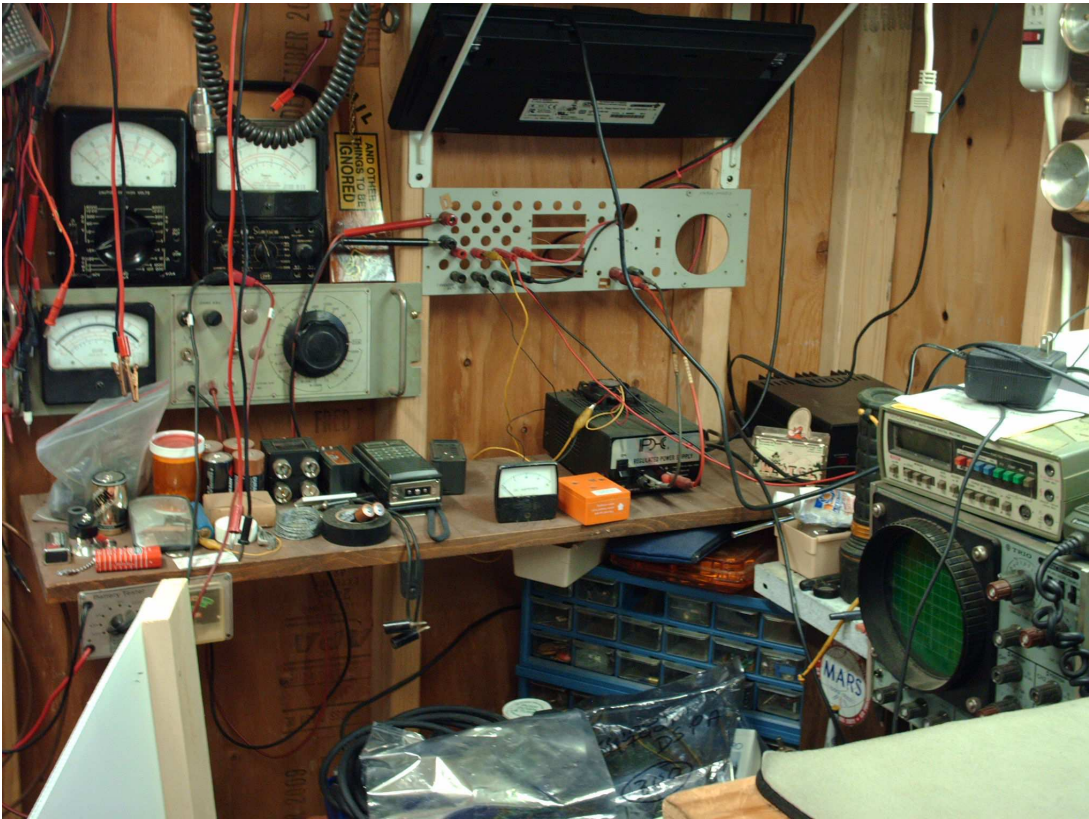
## **Messiest Workshop Challenge!**

**Can your workshop beat this?**  
(Send me pictures of your workshop)









## Ham Study Materials

Licensing and technical books are available at Centennial Electronics.







## ARRL Incoming QSL Bureaus

[www.arrl.org/incoming-qs1-service](http://www.arrl.org/incoming-qs1-service)

## ARRL Outgoing QSL Bureaus

[www.arrl.org/outgoing-qs1-service](http://www.arrl.org/outgoing-qs1-service)

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## ARRL Affiliated Clubs-Outgoing QSL cards

ARRL affiliated-club stations may use the service when submitting club QSLs for its members in bulk ("pooling" their members cards together in one package) by indicating the club name inside the package. Club secretaries should check club affiliation on the ARRL web site to ensure that their affiliation is current. In a "pooled" package, each club member using this service **must also be an ARRL member**. Cards should be sorted "en masse" by prefix and a proof of membership should be enclosed for each ARRL member. QSLs for unaffiliated club calls may also be sent

via the outgoing bureau to foreign destinations if the trustee of the club call is a member in good standing. The trustee's proof of membership must be included with the club call-QSLs.

## PPRAA Apparel

Both **Silk Screen and Embroidered** (Shirts, T-Shirts, Hats, Badges, etc.), members pay for individual shirts. Embroidered - Club logo = \$7. Call sign and name ordered together = \$7, Call sign or name ordered separately = \$5 each. The number to call to order is: (719) 591-6151. Monograms by Jane.

**Silkscreened** - T-Shirts with a one color left chest logo only no name or call sign: Small thru Xlarge: \$8.75 ea. T-Shirts with one color logo on left and name with call sign on right side: Small thru Xlarge: \$9.60 ea. for XXlarge add \$2.00 per shirt. POC Dick Thompson, WØRAA 719-520-0288

## Events In Colorado

### COQP

#### 2013 Colorado QSO Party

1200 UTC 31 August 2013 until 0400 UTC 1 September 2013 (6AM to 10PM MDT)

## From the annals of PPRAA history

Ø-BEAT AUGUST 1983



A nice little article on SWR and how it's a little ridiculous to worry about an SWR of 1.05 to 1. The club members at the July meeting acknowledged all the hams that helped with communications, and with the coordination, for the National Sports Festival recently. Special thanks to Bob KØDJ and Steve NØST. Ken WØTGL handed out the medallions to those that missed the dinner. Ken estimated the club donated \$100,000 worth of time and equipment to the effort. The club is still working on getting a station over at the Olympic Training Center. The club voted to meet at the Palmer House Motel one more time and then find another place to meet. KØDJ is looking for another person to be club call sign custodian for WAØVTU. The August program will be on amateur TV. Mark NØEPF presented info that the club should become a Special Services Club. CCARC meeting will be in Glenwood Springs on July 23. The club may put on a mall demonstration at Chapel Hills Mall if a coordinator can be found.

## GETTING AN HF ANTENNA TO WORK 2

Your antenna is mounted and the coax is installed. What are you looking for to see if it works?

### *Resonance.*

What is that? You can liken it to a piano wire. Physically the size of the wire determines how fast the wire oscillates back and forth per second. That value is the resonant point of the wire. When it resonates you hear the tone it produces. With radio waves there are no moving parts. However depending on the frequency you chose to operate, the electrical energy oscillates at that value. Take 7 MHz, the current in the wire moves in one direction, weakens to the point of no current at all, then reverses in the opposite direction. This is done at 7 million times per second. In order for that energy to leave your radio and coax it needs a resonant device at the end, the antenna. What is in the antenna to make it a resonant device? Coming articles will go into this more. However to start, we can use a measurement most are familiar with, the Standing Wave Ratio or SWR. We usually measure SWR at the radio. What is it? You can liken it to a calm body of water. Now throw that HT in the water that did not work. The object makes waves coming to shore. The waves look like they are traveling in one direction. Once it hits the shore the wave can not go further so it returns along the same path. When this happens the wave going out and

coming in meet and it will look like the wave now is standing still, just going up and down in place. This also happens electrically when we have a Standing Wave on our coax line. The cause of the standing wave is due to an antenna that is not resonant. It also involves the resistance of the antenna, but that is for later. Therefore if you scan your band you are operating on and observe the SWR dip to a minimum then rise again, you had just past the resonant point of the antenna system. Many times this is all you need to do to know if your antenna is working and if you need to raise or lower the resonant point. This can be done with an Antenna analyzer or your radio. Using the radio, set it to a low power, use CW or FM, (not ssb) and slowly scan the band you are using. If the antenna is working you should see a rise and fall in SWR value. Where the SWR is minimum is the resonant point of your antenna system.

What if you need to know more to get it working? More will be covered in the next articles.

## GETTING AN HF ANTENNA TO WORK 3

Last time resonance was mentioned and minimum SWR determined that point. Now we can go into the 2 components of resonance.

Start with inductance. Normally a coil of wire that produces a magnetic field when we put an electrical source into it. This magnetic field oscillates the same as the frequency that we are using. For example, at 7 MHz, the magnetic field is oscillating at 7 million times per second. When this magnetic field increases, decreases and reverses it causes an electrical current in the coil opposite to the current we sent into it. This opposite field battles with the incoming source from your transmitter, is due to how it acts in the circuit. The resistance varies with the offering a resistance.

The larger the coil in diameter, and number of windings determine how much resistance it produces. This resistance is called "INDUCTIVE REACTANCE". Like a regular resister, it is measured in ohms. You will often see it referred to as XL.

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The reason we call it reactance frequency of electrical energy you put into it.

The reactance increases with an increase in frequency. It decreases with a decrease in frequency. If you want to get fancy the formula is.

$$X_L = 2\pi f I$$

$X_L$  = INDUCTIVE REACTANCE (in ohms)

$\pi$  = ABOUT 3.14

$f$  = FREQUENCY

$I$  = INDUCTANCE IN HENRIES

Since the reactance varies with frequency, inductors are measured in Henries. With this value you can go to a reactance chart and know what the resistance in ohms will be for any frequency.

What we want to keep in mind, is inductive reactance increases with an increase of frequency and decreases with a decrease in frequency.

Next time we will offer information on its partner, "CAPACITIVE REACTANCE".

73,

Ralph WDØEJA

## CONTESTS

### August 2013

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± QRP Fox Hunt	0100Z-0230Z, Aug 2
± NCCC RTTY Sprint	0130Z-0200Z, Aug 2
± NCCC Sprint Ladder	0230Z-0300Z, Aug 2
± TARA Grid Dip Shindig	0000Z-2400Z, Aug 3
± 10-10 Int. Summer Contest, SSB	0001Z, Aug 3 to 2359Z, Aug 4
± European HF Championship	1200Z-2359Z, Aug 3
± North American QSO Party, CW	1800Z, Aug 3 to 0559Z, Aug 4
± ARRL August UHF Contest	1800Z, Aug 3 to 1800Z, Aug 4

± RSGB RoPoCo CW	0700Z-0830Z, Aug 4
± SARL HF Phone Contest	1300Z-1630Z, Aug 4
± ARS Spartan Sprint	0100Z-0300Z, Aug 6
± QRP Fox Hunt	0100Z-0230Z, Aug 9
± NCCC Sprint Ladder	0230Z-0300Z, Aug 9
± WAE DX Contest, CW	0000Z, Aug 10 to 2359Z, Aug 11
± SKCC Weekend Sprintathon	1200Z, Aug 10 to 2400Z, Aug 11
± Maryland-DC QSO Party	1600Z, Aug 10 to 0400Z, Aug 11 and 1600Z-2400Z, Aug 11
± 50 MHz Fall Sprint	2000Z-2400Z, Aug 10
± NAQCC Straight Key/Bug Sprint	0030Z-0230Z, Aug 14
± CWops Mini-CWT Test	1300Z-1400Z, Aug 14 and 1900Z-2000Z, Aug 14 and 0300Z-0400Z, Aug 15
± RSGB 80m Club Sprint, CW	1900Z-2000Z, Aug 14
± QRP Fox Hunt	0100Z-0230Z, Aug 16
± NCCC Sprint Ladder	0230Z-0300Z, Aug 16
± SARTG WW RTTY Contest	0000Z, Aug 17 to 1600Z, Aug 18
± ARRL 10 GHz and Up Contest	0600 local, Aug 17 to 2400 local, Aug 18
± North American QSO Party, SSB	1800Z, Aug 17 to 0559Z, Aug 18
± Feld Hell Sprint	2000Z-2200Z, Aug 17
± SARL HF Digital Contest	1300Z-1630Z, Aug 18
± ARRL Rookie Roundup, RTTY	1800Z-2359Z, Aug 18
± Run for the Bacon QRP Contest	0100Z-0300Z, Aug 19
± NAQCC-EU Monthly Sprint	1800Z-2000Z, Aug 19
± QRP Fox Hunt	0100Z-0230Z, Aug 23
± NCCC Sprint Ladder	0230Z-0300Z, Aug 23
± Hawaii QSO Party	0700Z, Aug 24 to 2200Z, Aug 25
± YO DX HF Contest	1200Z, Aug 24 to 1200Z, Aug 25
± SCC RTTY Championship	1200Z, Aug 24 to 1159Z, Aug 25
± Ohio QSO Party	1600Z, Aug 24 to 0400Z, Aug 25
± SARL HF CW Contest	1300Z-1630Z, Aug 25
± SKCC Sprint	0000Z-0200Z, Aug 28
± CWops Mini-CWT Test	1300Z-1400Z, Aug 28 and 1900Z-2000Z, Aug 28 and 0300Z-0400Z, Aug 29
± RSGB 80m Club Sprint, SSB	1900Z-2000Z, Aug 29
± QRP Fox Hunt	0100Z-0230Z, Aug 30
± NCCC Sprint Ladder	0230Z-0300Z, Aug 30
± Feld Hell Sprint	0000Z-2359Z, Aug 31
± CWops CW Open	0000Z-0359Z, Aug 31 and 1200Z-1559Z, Aug 31 and 2000Z-2359Z, Aug 31
± Colorado QSO Party	1200Z, Aug 31 to 0400Z, Sep 1





## MARC VE EXAMS

**(January, March, May, July, September, November)**

The Mountain Amateur Radio Club (MARC) VE Team conducts VE exam sessions in Woodland Park every odd month at 10 am on the first Saturday in the Community Meeting Room of the Woodland Park Library, 218 East Midland Avenue. The MARC VE Team is affiliated with the ARRL/VEC and examinations for all classes of license will be offered.

Full information, including driving directions to the Woodland Park Library, is available under "VE Sessions" on the MARC website at <http://www.nx0g.org/ve.html> or contact Wes Wilson (KØHBZ) at [k0hbx@arrl.net](mailto:k0hbx@arrl.net) or call (719) 687-8758.

If attending, please BE SURE to bring the following items to the session:

1. A valid **PHOTO ID**, driver's license preferred (if you do not have a valid photo ID, please call for alternative identification requirements).
2. Your **SOCIAL SECURITY NUMBER** (now required – this includes children) or **FRN** number.

3. Your **ORIGINAL** amateur radio license (if any) **AND** a **PHOTOCOPY** for the VE Team to keep.
4. The **ORIGINAL** of any relevant **CSCEs** you have **AND** a **PHOTOCOPY** for the VE Team to keep.
5. **Cash, Check or Money Order for \$15** (standard ARRL VE Fee). Checks and money orders should be made out to MARC and covers all the different exams you wish to take at the VE session.

MARC VE Team policy, as with many VE Teams, is to not allow same day retests on failed exams.

For already licensed hams, MARC members should be monitoring the MARC repeater system 146.820- or 448.650- (both 107.2 Hz) if you need help with talk-in.

73 Wes KØHBZ

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## **PPRAA VE EXAMS**

**(February, April, June, August October December)**

PPRAA VE session will be held at 9 am on the second Saturday of the even months at Colorado Technical University.

Directions to CTU are at the PPRAA website [ppraa.org](http://ppraa.org).

Applicants will need the following items at the session:

1. A **valid PHOTO ID**, driver's license preferred (if you do not have a valid photo ID, please call for alternative identification requirements).
2. Your **SOCIAL SECURITY NUMBER** (now required – this includes children) or **FRN** number.
3. Your **ORIGINAL** amateur radio license (if any) **AND** a **PHOTOCOPY** for the VE Team to keep.
4. The **ORIGINAL** of any relevant **CSCs** you have **AND** a **PHOTOCOPY** for the VE Team to keep.
5. **Cash, Check or Money Order for \$15** (standard ARRL VE Fee). Checks and money orders should be made out to ARRL and covers all the different exams you wish to take at the VE session.

PPRAA VE Team policy, as with many VE Teams, is to not allow same day retests on failed exams.

Galen Steele AGØA  
PPRAA VE Contact  
719-213-1109

Anyone passing their Technician Class examination at a PPRAA test session will receive a free year's membership to the Pikes Peak Radio Amateur Association.

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***Ditz n Bitz***  
**For Sale or Wanted**

Do you have something to sell, trying to find something or just want to see something get to a good home? Send it in to [wv7t@arrl.net](mailto:wv7t@arrl.net) and see it in Dits and Bits.



Also, visit the PPRAA Forum's online Ditz and Bitz at  
[www.ppraa.forumotion.net](http://www.ppraa.forumotion.net) !!

**Membership Application**  
**Pikes Peak Radio Amateur Association, Inc.**  
**P.O. Box 16521, Colorado Springs, Colorado 80935**

Date: \_\_\_\_\_ ☐ New Membership ☐ Renewal

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Call: \_\_\_\_\_ License Class: \_\_\_\_\_ Telephone: \_\_\_\_\_

Are you an ARRL member? ☐ Yes ☐ No

Additional Name: \_\_\_\_\_ Call \_\_\_\_\_ Class \_\_\_\_\_ ARRL member? ☐ Yes ☐ No

Additional Name: \_\_\_\_\_ Call \_\_\_\_\_ Class \_\_\_\_\_ ARRL member? ☐ Yes ☐ No

Additional Name: \_\_\_\_\_ Call \_\_\_\_\_ Class \_\_\_\_\_ ARRL member? ☐ Yes ☐ No

E-mail address: \_\_\_\_\_

☐ Full Member - \$15.00

☐ Full Member over 65 - \$10.00

☐ Free - VE Signature Required:

☐ Family Membership (same address) - \$18.00

☐ Family Membership (both over 65) - \$12.00

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**Pikes Peak Radio Amateur Association, Inc.  
P.O. Box 16521  
Colorado Springs, CO 80935-6521 USA**

**To:**